

#20

R. Hayes

**ENTERED**

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**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/09/577,468

DATE: 09/11/2003 -

TIME: 08:51:35

Input Set : N:\Crf3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

```

1 <110> APPLICANT: Stanley J. Wiegand
2 <120> TITLE OF INVENTION: MODIFIED CILIARY NEUROTROPHIC FACTOR, METHOD OF
3 MAKING AND METHODS OF USE THEREOF
4 <130> FILE REFERENCE: REG 142-B1
5 <140> CURRENT APPLICATION NUMBER: 09/577,468
6 <141> CURRENT FILING DATE: 2000-05-24
7 <150> PRIOR APPLICATION NUMBER: US/09/454,380
8 <151> PRIOR FILING DATE: 1999-12-03
9 <150> PRIOR APPLICATION NUMBER: 09/373,834
10 <151> PRIOR FILING DATE: 1999-08-13
11 <160> NUMBER OF SEQ ID NOS: 23
12 <170> SOFTWARE: FastSEQ for Windows Version 3.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 200
16 <212> TYPE: PRT
17 <213> ORGANISM: Homo sapiens
18 <400> SEQUENCE: 1
19 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
20 1 5 10 15
21 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
22 20 25 30
23 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
24 35 40 45
25 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
26 50 55 60
27 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
28 65 70 75 80
29 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
30 85 90 95
31 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
32 100 105 110
33 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile
34 115 120 125
35 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile
36 130 135 140
37 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
38 145 150 155 160
39 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
40 165 170 175
41 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His
42 180 185 190
43 Tyr Ile Ala Asn Asn Lys Lys Met
44 195 200

```

## RAW SEQUENCE LISTING

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Input Set : N:\Crif3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

```

46 <210> SEQ ID NO: 2
47 <211> LENGTH: 200
48 <212> TYPE: PRT
49 <213> ORGANISM: Rattus norvegicus
50 <400> SEQUENCE: 2
51   Met Ala Phe Ala Glu Gln Thr Pro Leu Thr Leu His Arg Arg Asp Leu
52     1           5           10           15
53   Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
54           20           25           30
55   Ala Leu Met Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
56           35           40           45
57   Asn Leu Asp Ser Val Asp Gly Val Pro Val Ala Ser Thr Asp Arg Trp
58     50           55           60
59   Ser Glu Met Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
60     65           70           75           80
61   Arg Thr Phe Gln Gly Met Leu Thr Lys Leu Leu Glu Asp Gln Arg Val
62           85           90           95
63   His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
64           100          105          110
65   Met Leu Gln Val Ser Ala Phe Ala Tyr Gln Leu Glu Glu Leu Met Val
66           115          120          125
67   Leu Leu Glu Gln Lys Ile Pro Glu Asn Glu Ala Asp Gly Met Pro Ala
68     130          135          140
69   Thr Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
70     145          150          155          160
71   Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
72           165          170          175
73   Arg Val Ile Ser Ser His Gln Met Gly Ile Ser Ala Leu Glu Ser His
74           180          185          190
75   Tyr Gly Ala Lys Asp Lys Gln Met
76           195          200
78 <210> SEQ ID NO: 3
79 <211> LENGTH: 199
80 <212> TYPE: PRT
81 <213> ORGANISM: Oryctolagus cuniculus
82 <400> SEQUENCE: 3
83   Met Ala Phe Met Glu His Ser Ala Leu Thr Pro His Arg Arg Glu Leu
84     1           5           10           15
85   Cys Ser Arg Thr Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
86           20           25           30
87   Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
88           35           40           45
89   Asn Leu Asp Ser Val Asp Gly Val Pro Met Ala Ser Thr Asp Gln Trp
90     50           55           60
91   Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
92     65           70           75           80
93   Arg Thr Phe His Ile Met Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
94           85           90           95
95   His Phe Thr Pro Ala Glu Gly Asp Phe His Gln Ala Ile His Thr Leu

```

## RAW SEQUENCE LISTING

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TIME: 08:51:35

Input Set : N:\Crif3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

```

96          100          105          110
97  Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Val
98          115          120          125
99  Leu Leu Glu Cys Asn Ile Pro Pro Lys Asp Ala Asp Gly Thr Pro Val
100         130         135         140
101  Ile Gly Gly Asp Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys Val
102        145         150         155         160
103  Leu Gln Glu Leu Ser His Trp Thr Val Arg Ser Ile His Asp Leu Arg
104         165         170         175
105  Val Ile Ser Cys His Gln Thr Gly Ile Pro Ala His Gly Ser His Tyr
106         180         185         190
107  Ile Ala Asn Asp Lys Glu Met
108         195
110 <210> SEQ ID NO: 4
111 <211> LENGTH: 198
112 <212> TYPE: PRT
113 <213> ORGANISM: Mus musculus
114 <400> SEQUENCE: 4
115  Met Ala Phe Ala Glu Gln Ser Pro Leu Thr Leu His Arg Arg Asp Leu
116    1          5          10          15
117  Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
118          20          25          30
119  Ala Leu Met Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
120          35          40          45
121  Ser Leu Asp Ser Val Asp Gly Val Pro Val Ala Ser Thr Asp Arg Trp
122          50          55          60
123  Ser Glu Met Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
124          65          70          75          80
125  Arg Thr Phe Gln Gly Met Leu Thr Lys Leu Leu Glu Asp Gln Arg Val
126          85          90          95
127  His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
128          100         105         110
129  Thr Leu Gln Val Ser Ala Phe Ala Tyr Gln Leu Glu Glu Leu Met Ala
130          115         120         125
131  Leu Leu Glu Gln Lys Val Pro Glu Lys Glu Ala Asp Gly Met Pro Val
132          130         135         140
133  Thr Ile Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
134          145         150         155         160
135  Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
136          165         170         175
137  Arg Val Ile Ser Ser His His Met Gly Ile Ser Ala His Glu Ser His
138          180         185         190
139  Tyr Gly Ala Lys Gln Met
140          195
142 <210> SEQ ID NO: 5
143 <211> LENGTH: 195
144 <212> TYPE: PRT
145 <213> ORGANISM: Gallus gallus
146 <400> SEQUENCE: 5

```

## RAW SEQUENCE LISTING

DATE: 09/11/2003

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TIME: 08:51:35

Input Set : N:\Crf3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

```

147 Met Ala Ala Ala Asp Thr Pro Ser Ala Thr Leu Arg His His Asp Leu
148 1 5 10 15
149 Cys Ser Arg Gly Ile Arg Leu Ala Arg Lys Met Arg Ser Asp Val Thr
150 20 25 30
151 Asp Leu Leu Asp Ile Tyr Val Glu Arg Gln Gly Leu Asp Ala Ser Ile
152 35 40 45
153 Ser Val Ala Ala Val Asp Gly Val Pro Thr Ala Ala Val Glu Arg Trp
154 50 55 60
155 Ala Glu Gln Thr Gly Thr Gln Arg Leu Leu Asp Asn Leu Ala Ala Tyr
156 65 70 75 80
157 Arg Ala Phe Arg Thr Leu Leu Ala Gln Met Leu Glu Glu Gln Arg Glu
158 85 90 95
159 Leu Leu Gly Asp Thr Asp Ala Glu Leu Gly Pro Ala Leu Ala Met
160 100 105 110
161 Leu Leu Gln Val Ser Ala Phe Val Tyr His Leu Glu Glu Leu Leu Glu
162 115 120 125
163 Leu Glu Ser Arg Gly Ala Pro Ala Glu Glu Gly Ser Glu Pro Pro Ala
164 130 135 140
165 Pro Pro Arg Leu Ser Leu Phe Glu Gln Lys Leu Arg Gly Leu Arg Val
166 145 150 155 160
167 Leu Arg Glu Leu Ala Gln Trp Ala Val Arg Ser Val Arg Asp Leu Arg
168 165 170 175
169 Gln Leu Ser Lys His Gly Pro Gly Ser Gly Ala Ala Leu Gly Leu Pro
170 180 185 190
171 Glu Ser Gln
172 195
174 <210> SEQ ID NO: 6
175 <211> LENGTH: 200
176 <212> TYPE: PRT
177 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Modified CNTF
180 <400> SEQUENCE: 6
181 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
182 1 5 10 15
183 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
184 20 25 30
185 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
186 35 40 45
187 Asn Leu Asp Ser Val Asp Gly Val Pro Val Ala Ser Thr Asp Arg Trp
188 50 55 60
189 Ser Glu Met Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
190 65 70 75 80
191 Arg Thr Phe Gln Gly Met Leu Thr Lys Leu Leu Glu Asp Gln Arg Val
192 85 90 95
193 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
194 100 105 110
195 Met Leu Gln Val Ser Ala Phe Ala Tyr Gln Leu Glu Glu Leu Met Val
196 115 120 125

```

## RAW SEQUENCE LISTING

DATE: 09/11/2003

PATENT APPLICATION: US/09/577,468

TIME: 08:51:35

Input Set : N:\CrF3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

```

197      Leu Leu Glu Gln Lys Ile Pro Glu Asn Glu Ala Asp Gly Met Pro Ala
198          130          135          140
199      Thr Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
200          145          150          155          160
201      Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
202          165          170          175
203      Arg Val Ile Ser Ser His Gln Met Gly Ile Ser Ala Leu Glu Ser His
204          180          185          190
205      Tyr Gly Ala Lys Asp Lys Gln Met
206          195          200
208 <210> SEQ ID NO: 7
209 <211> LENGTH: 200
210 <212> TYPE: PRT
211 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Modified CNTF
214 <400> SEQUENCE: 7
215      Met Ala Phe Ala Glu Gln Thr Pro Leu Thr Leu His Arg Arg Asp Leu
216          1          5          10          15
217      Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
218          20          25          30
219      Ala Leu Met Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
220          35          40          45
221      Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
222          50          55          60
223      Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
224          65          70          75          80
225      Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
226          85          90          95
227      His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
228          100          105          110
229      Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile
230          115          120          125
231      Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile
232          130          135          140
233      Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
234          145          150          155          160
235      Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
236          165          170          175
237      Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His
238          180          185          190
239      Tyr Ile Ala Asn Asn Lys Lys Met
240          195          200
242 <210> SEQ ID NO: 8
243 <211> LENGTH: 200
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Modified CNTF

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/577,468

DATE: 09/11/2003  
TIME: 08:51:36

Input Set : N:\Crf3\RULE60\09577468.raw.txt  
Output Set: N:\CRF4\09112003\I577468.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:18; Line(s) 585  
Seq#:19; Line(s) 594  
Seq#:20; Line(s) 603,604  
Seq#:21; Line(s) 613  
Seq#:22; Line(s) 622  
Seq#:23; Line(s) 631

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/577,468

DATE: 09/11/2003

TIME: 08:51:36

Input Set : N:\Crf3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

**STATISTICS SUMMARY**

PATENT APPLICATION: US/09/577,468

DATE: 09/11/2003

TIME: 08:51:36

Input Set : N:\Crf3\RULE60\09577468.raw.txt

Output Set: N:\CRF4\09112003\I577468.raw

Application Serial Number: US/09/577,468

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 05-24-2000

Art Unit: OIPE

Software Application: FastSEQ3.0

Total Number of Sequences: 23

Total Nucleotides: 233

Total Amino Acids: 3361

Number of Errors: 0

Number of Warnings: 0

Number of Corrections: 0

**MESSAGE SUMMARY**